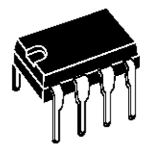
SGS-THOMSON MICROELECTRONICS

TDA7267

2W MONO AMPLIFIER

- CAN DELIVER 2W THD 10% 12V/8Ω
- INTERNAL FIXED GAIN 32dB
- NO FEEDBACK CAPACITOR
- NO BOUCHEROT CELL
- THERMAL PROTECTION
- AC SHORT CIRCUIT PROTECTION
- SVR CAPACITOR FOR BETTER RIPPLE REJECTION
- LOW TURN-ON/OFF POP
- STAND-BY MODE



MINIDIP (4+4)

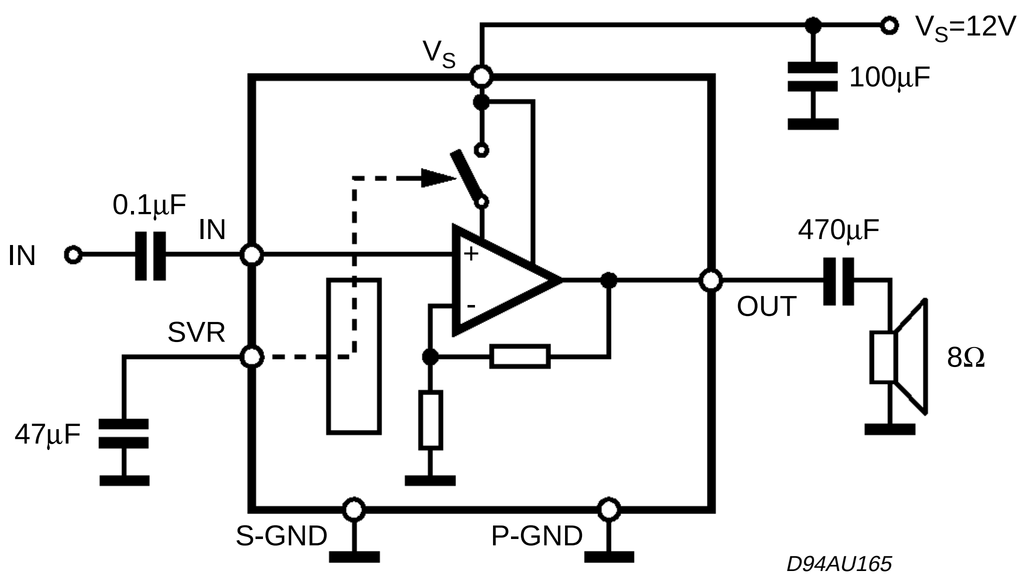
ORDERING NUMBER: TDA7267

DESCRIPTION

The device TDA7267 is a new technology Mono Audio Amplifier in MINIDIP package specifically designed for TV application.

Thanks to the fully complementary output configuration the device delivers a rail to rail voltage swing without need of boostrap capacitors.

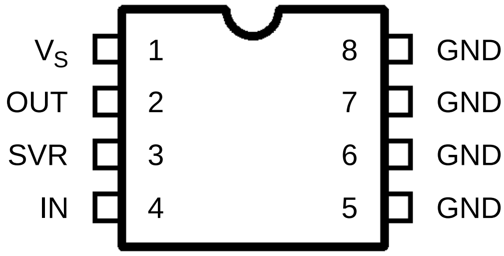
BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_S	Operating Supply Voltage	18	V
I_O	Output Put Peak Current	1.5	A
T_{op}	Operating Temperature Range	0 to 70	°C
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-40 to 125	°C

PIN CONNECTION (Top view)



D94AU163

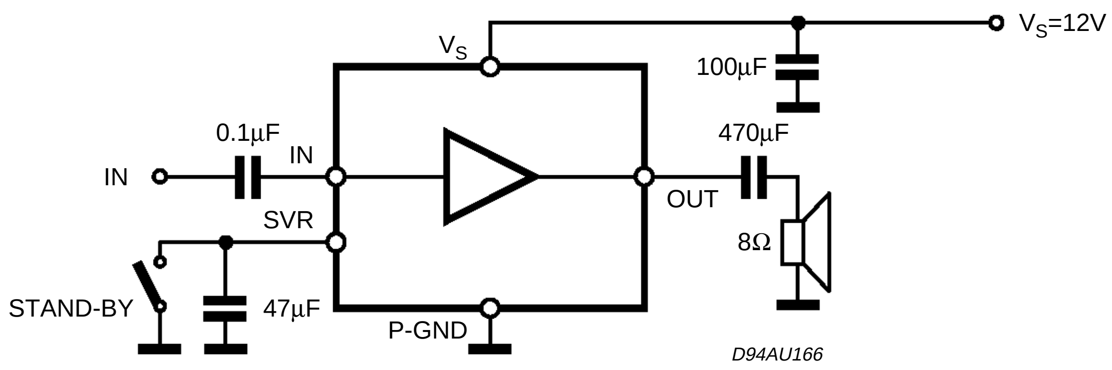
THERMAL DATA

Symbol	Parameter	Value	Unit
$R_{th\ j\text{-}amb}$	Thermal Resistance Junction to ambient (on PCB)	80	°C/W
$R_{th\ j\text{-}case}$	Thermal Resistance Junction to case	15	°C/W

ELECTRICAL CHARACTERISTICS (T_{amb} = 25°C; V_S = 12V; R_L = 8Ω; f = 1KHz; unless otherwise specified.)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V_S	Supply Voltage Range		4.5		18	V
I_S	Quiescent Current			20	30	mA
I_{sb}	Stand-By Current	Pin 2 shorted to GND			0.3	mA
V_O	Quiescent Output Voltage			6		V
A_V	Voltage Gain			32		dB
R_{IN}	Input Impedance			100		KΩ
P_O	Output Power	THD = 10%	1.8	2		W
THD	Distortion	P_O = 1W			1.0	%
SVR	Supply Voltage Rejection	V_{ripple} = 150mVrms; F_{ripple} = 1KHz		50		dB
E_I	Input Noise Voltage	Rg = 10KΩ; BW = 20Hz to 20KHz		1.5	5	µV
V_{sb}	Stand-By Enable Voltage				1	V

APPLICATION CIRCUIT



APPLICATION HINTS:

For 12V supply and 8Ω speaker application, its maximum power dissipation is about 1W.

Assumming that max ambient temperature is 70°C. Required thermal resistance of the device and heat dissipating means must be equal to (150 - 70)/1 = 80°C/W.

Junction to pin thermal resistance of the package is about 15°C/W. That means external heat sink of about 65°C/W is required.

Cu ground plane of PCB can be used as heat dissipating means.

Stand-By switches must be able to discharge C_{svr} current.

MINIDIP PACKAGE MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A		3.3			0.130	
a1	0.7			0.028		
B	1.39		1.65	0.055		0.065
B1	0.91		1.04	0.036		0.041
b		0.5			0.020	
b1	0.38		0.5	0.015		0.020
D			9.8			0.386
E		8.8			0.346	
e		2.54			0.100	
e3		7.62			0.300	
e4		7.62			0.300	
F			7.1			0.280
I			4.8			0.189
L		3.3			0.130	
Z	0.44		1.6	0.017		0.063

